

CompTIA's Certifications & Their Role in ICT Workforce Development

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Today's Agenda

- About CompTIA
- CompTIA's Industry Certification Programs
 - CompTIA & IT Skilling
 - Global Standards
 - Foundational & Vendor Neutral
 - Certifications or Qualifications
- CompTIA's certification model
- Overview of CompTIA's A+, Network+ & Security+ certifications
- Questions

A community of communities...

- **Inclusive**
 - Members from major industry segments, representing all in the IT industry; Hardware; Software; Telecommunications; IT Services and Educators
 - Established in **1982**, CompTIA has corporate members in **102** countries
 - Corporations and Not-for-profit organizations/ Schools, Community Colleges and Universities/**government** partnerships
 - 85% are small to medium enterprises (SME's)
- **Effective**
 - Industry driven through **members** 'cornerstone' process
 - CompTIA advances the interests of the IT industry through **public policy** initiatives by actively engaging government policy makers
 - Active in promoting **technology choice** in products, services and standards
 - Active in promoting **trade in services** globally
- **Global**
 - Worlds **largest vendor-neutral** provider of IT certifications that validates training
 - Certification programs are ANSI/**ISO**/IEC 17024 certified for the operation of accreditation bodies (ISO/IEC 17011)
 - Successful track record of collaboration and facilitation on global standards
 - 14 offices on six continents - including Asia -Pac since 1999

Who is CompTIA

CompTIA has members from the full spectrum of the IT industry
Hardware; Software; Telecommunications; IT Services and Educators

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•Alien Technology Corporation

•Apple Inc

•AT&T Internet Services

•BFC (Integrated Print Management)

•Canon, USA

•Chicago Public Schools

•Circuit City Stores Inc.

•Cisco Systems Inc.

•CompuCom Systems Inc.

•CompUSA

•Cprod

•CSK

•Dell Canada Inc.

•Dell Europe Du Sud

•EDS

•Element K

•Embraer Aircraft Manufacturing

•Epson Europe B.V.

Cisco

HP

Toshiba

•Fujitsu Computer

•Global Knowledge Network

•gtslearning

•Hewlett-Packard Co.

•Ingram Micro Inc.

•Intel

•Juniper Networks

•Lenovo

•Lexar Media

•McAfee Inc.

•MicroTek

•Microsoft

•Motorola

•NCR Corporation

•New Horizons

•New York City Department of Education

•NIIT Ltd.

•Novell

AT&T

Lenovo

Motorola

Fujitsu

Microsoft

•NTT Data

•Packard Bell France

•ProsoftTraining.com

•Ricoh Corp.

•Sharp Electronics Corporation

•Siemens Enterprise Communications GmbH & Co. KG

•Samsung Electronics America

•Sybex, Inc.

•TAC

•Tandy/Radio Shack

•TechData Corp.

•Technology Service Technology Service

•Texas Instruments

•Toshiba America

•Toshiba America Medical Systems Inc.

•Websense

•Western Governors University

•Xerox Corporation

Intel

Siemens

Apple

Where is CompTIA



CompTIA and IT Skilling

- *Skilling* is the application of training to the workplace
- *Certification* is the validation of training to a set standard
- Industry *standards* are required for employment
- CompTIA is the developer of 14 industry developed vendor-neutral certification exams
 - More than 1,000,000 CompTIA certification holders worldwide
- A leader of industry initiatives in:
 - E-commerce
 - Workforce Development & Training
 - Public Policy
 - Software Services
 - Convergence technology
 - IT Services

Industry Standards for Foundation-Level IT Skills

- CompTIA's vendor-neutral certifications ensure workers have the foundation - level knowledge and skills to perform their job roles in the It industry and those industries that use IT.
- CompTIA certifications are developed with the support of Industry-leading organizations and validated by field experts from around the world
 - - Required to start basic production and offshoring centers
 - - Acts as entry-point into vendor-specific certification and training programs
 - - Bridges academia and proprietary programs
 - - Endorsed by leading vendors worldwide
 - - Available in English, Japanese and Korean

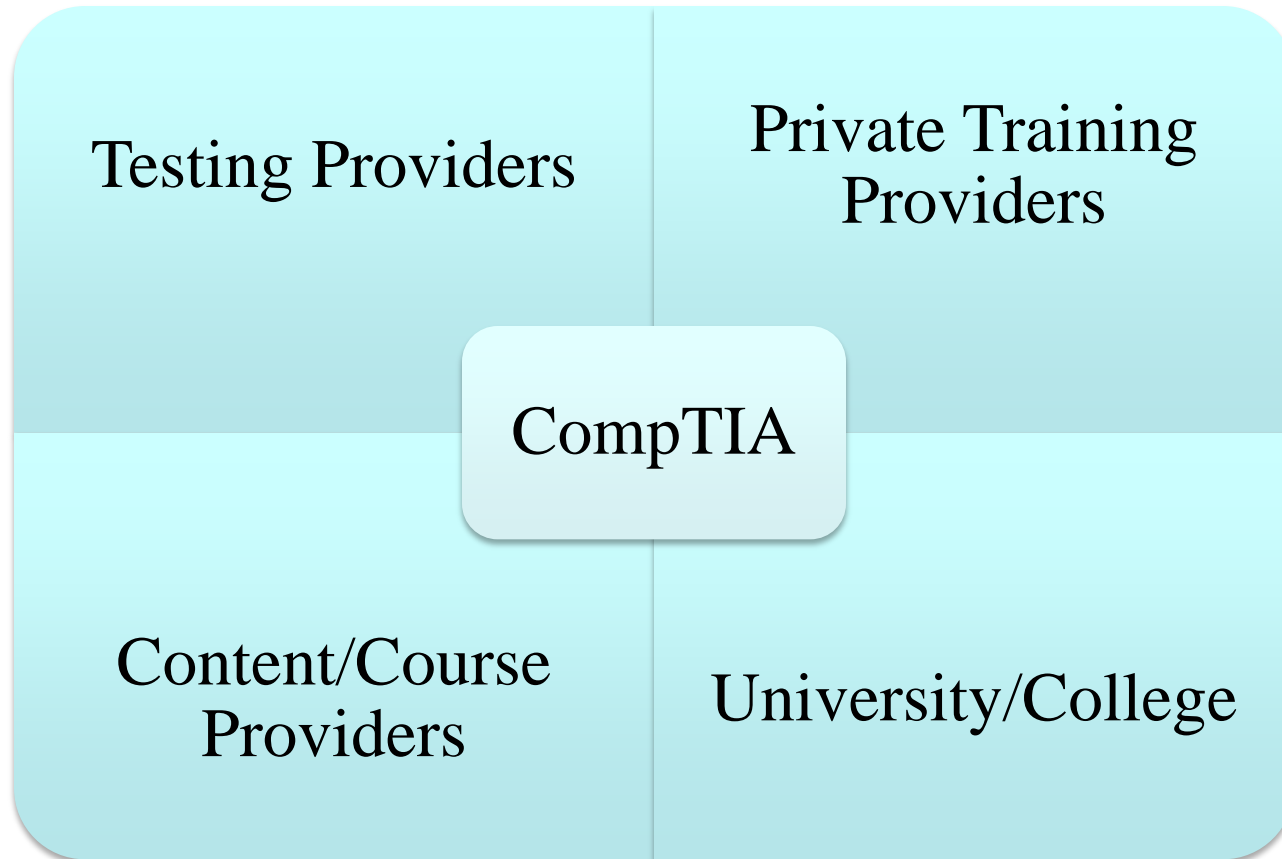
Benefits of Neutrality

- Vendor neutral certifications are:
 - Transferable between the private and public sectors
 - Recognized by the private and public sectors
 - Required/strongly recommended by many certifying and educational bodies
 - Globally recognized and approved standards – ISO 17024
- Vendor neutral certifications provide:
 - Efficiency in recruiting, hiring, training and promoting staff and employees
 - Identifiable career paths, transferable skills and credentials that are industry recognized

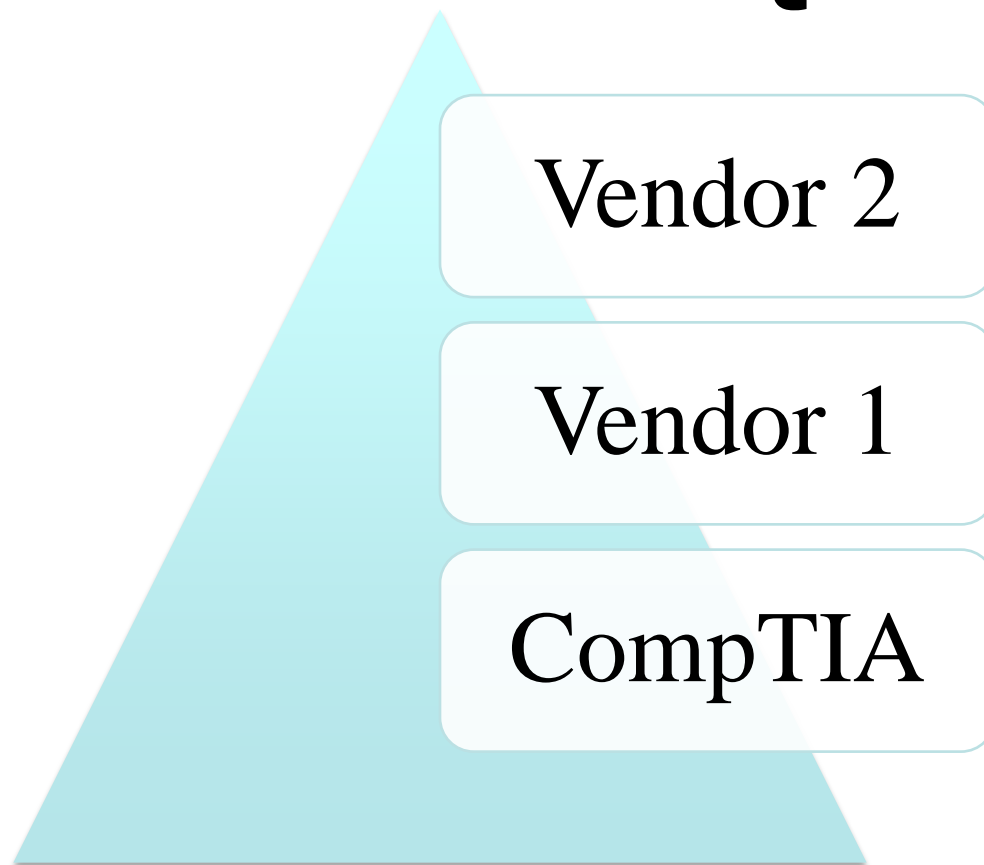
Certification or Qualification?

- I.T Degrees and Diplomas will remain; they won't become “irrelevant”
- Many institutions are seeing a need to include I.T Certifications as part of their academic offerings
- “Dual outcomes” i.e. a local academic qualification with an international vendor certification is the best measure for success
- Certifications alone are not enough

CompTIA's Learning Ecosystem

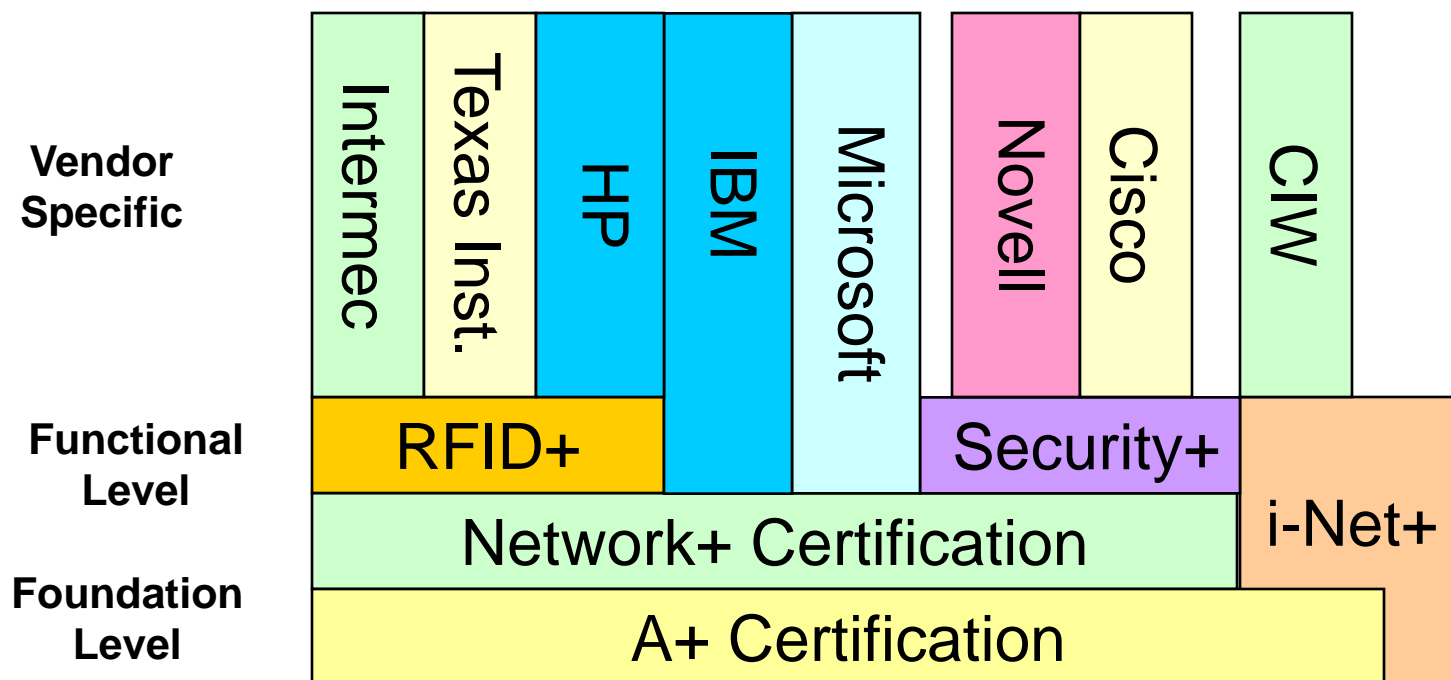


CompTIA's Relationship to a Vendors Qualification



Integration with the IT Industry

Foundation Level Vendor-Neutral Certification reduces redundant training but does not eliminate “higher level” vendor-specific training and certification



Certification Mapping Example

Hardware Electronics

- A+
- Network+
- PDI+

Digital Content

- Security+
- Convergence+

Software Industry

- Project+
- Security+

An Overview of Three CompTIA Certifications

- A+
- Network+
- Security+

CompTIA 's A+ Certification

- Provides the framework of the skills and knowledge required to perform the duties of an entry-level IT professional.
- Uses training & testing to validate an individual's mastery of that knowledge and those skills.
- Provides the foundation to build an IT career by feeding into vendor-specific programs.

CompTIA A+

Entry-Level IT Positions

- **IT Technician** – Whether supporting customer networks or internal infrastructure, CompTIA A+ provides the groundwork for a successful career in IT technical services
- **Remote Support Technician** – Help desks, phone, email, and web support, and remote personnel support skills are in demand as more people interact with PCs every day
- **Bench Technician** – Pure, hands-on PC construction and repair skills are needed by manufacturers and in retail stores worldwide

CompTIA's A+ and its Fit into the IT industry

- Over 700,000 individuals are CompTIA A+ certified.
- CompTIA A+ is the recognized foundation of IT professional skills
 - Microsoft's MCSE certification lists A+ as an elective
 - Cisco Essentials 4.0 is mapped to match the CompTIA A+ objectives
 - OEM's such as Ricoh, Lenovo, and Sharp require CompTIA A+ in their warranty reimbursement programs
 - Many IT employers require A+ for IT staff

Network+ Certification Overview

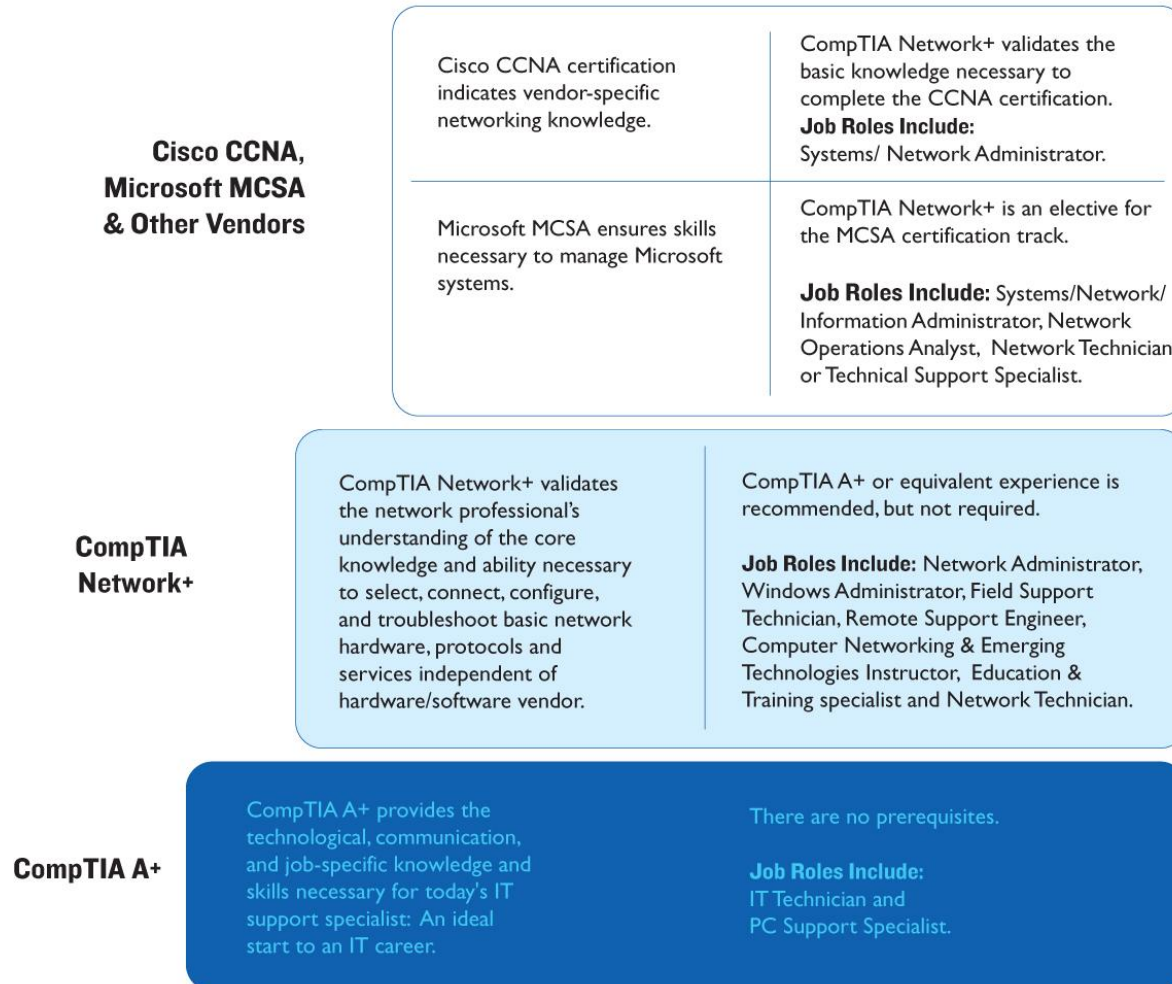
- CompTIA Network+ is a vendor neutral foundational certification for networking professionals.
- It validates the certified network professional's understanding of the core knowledge and ability necessary to select, connect, configure and troubleshoot basic vendor neutral network hardware, protocols, and services.
- The objectives of CompTIA Network+ objectives were derived through a job task analysis that was created by a group of subject matter experts from industry, government, academia.
- CompTIA Network + is recommended for networking professionals with 9 months experience, or adequate academic training, or CompTIA A+.
- The domains measured by the CompTIA Network+ examination are:
 - Media and Topologies 20%
 - Protocols and Standards 20%
 - Network Implementation 25%
 - Network Support 35%

Primary Job Roles and Markets

- Typical job roles for CompTIA Network+:
 - Network Administrator, Windows Administrator, Field Support Technician, Remote Support Engineer, Computer Networking & Emerging Technologies Instructor, Education & Training Specialist and Network Technician.
- Primary markets and users of CompTIA Network+:
 - Enterprise (Hardware/software manufacturers and service providers)
 - Government & government contractors
 - Financial institutions and insurance companies
 - Healthcare organizations, both insurers and manufacturers
 - Consulting
 - Education

CompTIA Network+

A Stepping Stone to Other Vendor Certifications



Vendors Supporting CompTIA Network+

- CompTIA Network+ is recognized as a requirement, mandate, option, continuing development credit or part of their own certification by leading organizations.
 - AT&T
 - Avaya
 - Canon
 - Cida 1ct Academy
 - Dell
 - EDS
 - Ericsson
 - Fuji Xerox Tokyp
 - General Dynamics
 - Hitachi Electronics
 - Konica Minolta
 - Ricoh
 - Siemens
 - Sutherland Global Services
 - Toshiba
 - Xerox

CompTIA Security+ Description

- Vendor-neutral foundational certification validating broad knowledge and experience of the day-to-day hands-on security worker
- Over 60,000 Security+ certified IT professionals
- Recommended candidate pre-existing knowledge and experience:
 - Network+ or equivalent certification
 - 2 years experience with emphasis on security.
 - Adequate self study or formal training and review of exam objectives
- Security+ exam has recently been updated; new exam launched October 28
- New exam objectives:
 - Systems security
 - Network infrastructure
 - Access control
 - Assessments and Audits
 - Cryptography
 - Organizational security

Security+

Primary Job Roles and Markets

- Typical job roles for CompTIA Security+:
 - Security administrator, security analyst, consultant, technical support representative (security), technical sales
- Primary markets and users of CompTIA Security+:
 - Government & government contractors
 - Financial institutions and insurance companies
 - Healthcare organizations, both insurers and manufacturers
 - Hardware/software manufacturers and service providers

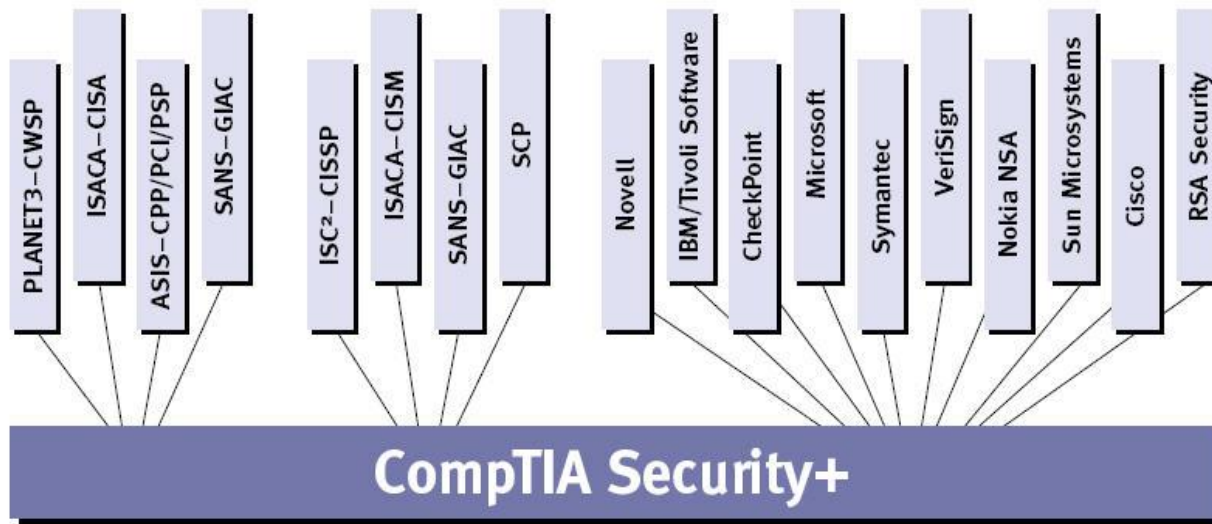
Domain Specific

- Auditing
- Firewalls
- Investigation
- Physical
- Protection
- Wireless, etc.

Vendor Neutral*

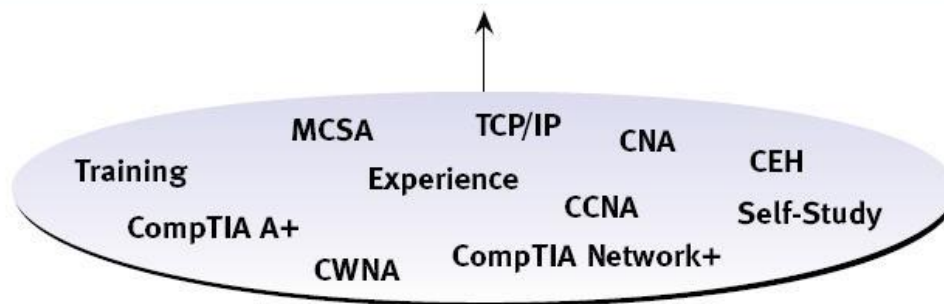
*Although specific vendors and products may be mentioned, there is no direct affiliation between the certification and vendor.

Vendor/Technology Specific



Jobs

Chief Security Officer
Chief Information Security Officer
Security Director
Senior Security Manager
Security Architect
Security Consultant
Security Engineer
Security Developer
Security Manager
Security Consultant
Security Technologist
Information Assurance Specialist
Security Specialist
Security Administrator
Wireless Administrator
LAN/WAN Administrator
Network Administrator



CEH Certified Ethical Hacker
CCNA Cisco Certified Network Associate
CNA Certified Network Administrator
CWNA Certified Wireless Network Admin.
MCSA Microsoft Certified Systems Admin.

Sample of where Security+ certified professionals work (certified at least 5 in 2007) * indicates large numbers

- Accenture – consulting, accounting
- Advanced Systems Development (ASD) – technology support
- Advanced Technology Services – factory maintenance/repair/IT support
- Alltel – telephone, wireless
- All branches of U.S. Military
- AT&T – telephone
- BAE Systems* – defense & aerospace
- Blue Cross Blue Shield – health insurance
- Best Buy – electronics retail
- Booz Allen Hamilton* – consulting
- CACI – information technology services
- CDW* – computer/software retailer
- CITI (Creative Information Technology)* – gov't. contractor
- Compucom – systems, network integration services
- Computer Sciences Corporation* – gov't. contractor
- Dell – computer manufacturer
- Deloitte* – consulting

CompTIA. Continued: Sample of where Security+ certified professionals work (certified at least 5 in 2007)

- Dept. of State
- DHL – transportation
- EDS* – IT services
- Fujitsu* (Japan) – systems integration, IT management
- General Dynamics* - gov't. contractor
- HP* – computer products
- IBM* - computer products and services
- Intel – chip manufacturer
- Jacobs – industrial technology, services
- JP Morgan Chase* - banking
- Kraft – food products
- L-3 Communications* - gov't. contractor
- Lockheed Martin – defense contractor, airplanes, aerospace
- McAfee – security products
- Medquist – healthcare
- Motorola – voice/data products
- Northrop Grumman* – gov't. contractor – systems
- Verizon* – wireless products, services

**For further information please contact
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CompTIA

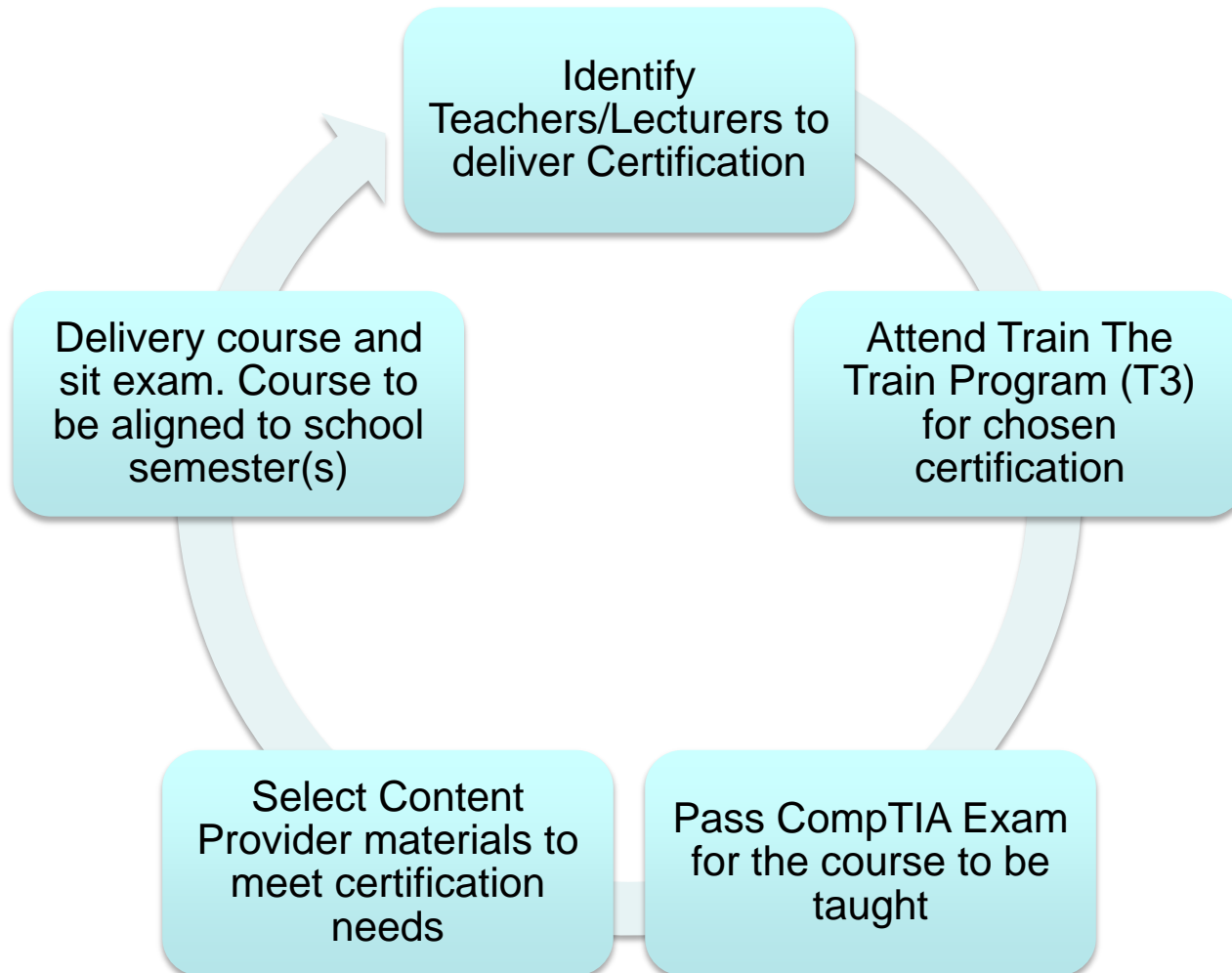
Email gkoch@comptia.org

www.comptia.org

Addendum

- Academic model for certification process
- Testimonials:
 - A+
 - Network+
 - Security+

Certification Go To Market Example (Academic)



CompTIA A+ Testimonial

“Geek Squad was built on soft skills. Break fix is a commodity – if a customer pays for a repair, they expect it. What makes Geek Squad unique is the customer experience - meeting their needs, going above and beyond and making an unpleasant experience an enjoyable one. So the addition of soft skills to CompTIA A+ is very important to us.”

- Frank Partida, field marshall – Geek Squad, Best Buy

CompTIA A+ Testimonial

"I look at service as a three-legged stool. One leg is software, one leg is hardware and the third is the customer, which is the most important. We look for people who have soft skills to make the customer feel good about the service experience. The addition of soft skills to CompTIA A+ helps enhance the technician's ability to take care of the customer."

**-Peter Manny, vice president service operations,
Siemens**

CompTIA A+ Testimonial

"Adding security to the CompTIA A+ exam is important because technicians, particularly entry-level technicians, spend a lot of time on spyware and virus removal. It's a huge part of the job. You can't consider yourself a professional anymore if you don't know about security. It's the equivalent of what replacing a hard drive was six years ago. New techs have to be prepared for this."

- **Brett Knight, network analyst, Embraer Aircraft Manufacturing**

CompTIA Network+ Testimonial

“Today, workplace environments are not comprised of just one vendor and it takes a long time to specialize in all vendor products. CompTIA Network+ allows employers to narrow down the candidate pool by feeling confident a potential employee has knowledge over multiple operating systems and platforms. Once that employee is on board, it also assists in annual technician reviews by highlighting strengths and weaknesses.”

*Dominic Pedroza
Global Technology & Operations
Deutsche Bank*

CompTIA Network+ Testimonial

“CompTIA Network+ is a good certification for IT generalists to have, because it gives a broad understanding of networking technologies beyond what CompTIA A+ covers. For a technician who is specializing in networks, CompTIA Network+ is the launching pad certification that will prepare them for earning vendor-specific certifications in the future.”

Brett Knight
Senior Network Analyst
Embraer Aircraft

CompTIA Network+ Testimonial

The following is a testimonial from Angel Pineiro, Senior Vice President, Support services, ASI system Integration:

- *“We’ve been able to increase our client base as a result of having our technicians Network+ certified. It’s been a huge advantage over our competitors. We make it very well-known that our technicians come to us with the necessary skills.”*

CompTIA Network+ Testimonial

“I always look for CompTIA Network+ on a job applicant’s resume because I can be certain that candidate has a broad base knowledge of networking technologies. It tells me they’re motivated to learn, and it shows they have the ambition and drive to prove their knowledge. I estimate 75 to 80 percent of my hiring decision is based on whether or not an individual has earned their CompTIA certifications.”

Richard Johns

Management Systems Engineer – Consultant

Spherion

Security+ Testimonial

“I would say that CompTIA Security+ is absolutely useful for security technicians. If they know the technology, they can help customers with their security networks. That gives us credibility as a company. I find it absolutely helps them communicate security issues about their customer’s network...CompTIA Security+ has been useful to me in teaching the technology. Just the knowledge that comes with it enables me to pass it along to the students. My job is to teach, and if I have the knowledge I can pass it along. I would and do recommend CompTIA Security+.”

Stan Godard
Technical Trainer
Lanier, a division of Ricoh

Certifications held: CompTIA A+, CompTIA Network+, CompTIA Security+, CompTIA CTT+, MCSE, MCT. Lanier requires a minimum of CompTIA A+ or CompTIA Network+ for employees, and both are preferred.

Security+ Testimonial

“Benchmarking foundational skills through CompTIA Security+ certification and then adding progressive layers of expertise seems to us to be absolutely the right thing to do from both the customer and employee standpoints.”

Steve Jordan
Vice President, System Engineering & Consulting
McAfee, Inc.

Security+ Testimonial

“You only have to open a newspaper to see how important security knowledge has become for those who are handling sensitive information...CompTIA certifications are baseline credentials – starting points – they create a common baseline and a common terminology across an organization.”

Jane Scott Norris

Dean, School of Applied Information Technology (SAIT)

U.S. State Department

The U.S. State Department has in place a Skills Incentive Program (SIP) which offers a bonus to employees who earn approved IT certifications or degrees. The SIP includes a set of continuing education requirements each year that are mandatory in order for employees to continue receiving the SIP pay increase.